

Application no. 10/725,235

REMARKS

Reconsideration and continued examination of the above-identified application are respectfully requested.

Claims 1-23 remain in this application. Claims 1 and 20 have been amended to clarify that the polymer exchange membrane is located in the fuel cell. The amendments to the claims further define what the applicants regard as their invention, and broaden the claims.

The Examiner rejects claim 1 of the present application under 35 U.S.C. §102(b) as being anticipated by Patil *et al.* (U.S. patent no. 4,038,365). Applicants respectfully traverse this rejection.

Claim 1 of the present application recites, in part, a fuel cell fuel filter comprising a perfluorinated sulfonic acid polymer medium that is substantially similar to the polymer exchange membrane (PEM) in the fuel cell. Patil *et al.* relates to a brine filtering process for chlorine cells. Patil *et al.* is silent as to fuel cell, and, therefore, does not disclose that the filter medium is substantially similar to the PEM in the fuel cell. Hence, claim 1 is patentable over Patil *et al.*

The Examiner also rejects claim 1 under 35 U.S.C. §103(a) as being obvious over hypothetical combination of Derflinger *et al.* (U.S. patent no. 6,723,460) and Patil *et al.* According to the Examiner, Derflinger *et al.* does not teach the type of filter employed; however, one skilled in the art would be motivated to substitute the filter of Patil *et al.* for the ion exchanger unit of Derflinger *et al.*

As discussed above, Patil *et al.* relates to a brine filtering process for chlorine cells. Brine feed cannot be used as fuel cell fuel. According to the Court of Appeals for the Federal Circuit, an analogous art relates to solving the same technical problems faced by an

Application no. 10/725,235

inventor. The Court in *In re Oetiker*, 24 U.S.P.Q.2d 1443, 1446 (Fed. Cir. 1992) rejected the contention that all hooking problems are analogous. The court concluded that a person of ordinary skill in the art seeking to avoid a problem of fastening a hose clamp would not reasonably be expected or motivated to look to fasteners for garments. Hence, a person of ordinary skill in the art seeking to filter a fuel cell fuel would not reasonably be expected or motivated to look to filtering brine feed in chlorine cells. Brine feed is simply not a fuel that can be used in fuel cells.

Hence, Patil *et al.* is not in the same field of endeavor, and it is not pertinent to the problems associated with the fuel of a fuel cell. Thus, Patil *et al.* is non-analogous art, and is not available for the hypothetical combination with Derflinger *et al.*

Derflinger *et al.* relates to a fuel cell system that has a fuel cell unit with an ion exchange unit (3), which does not reduce the electrical conductivity of the medium and acts as coarse filter and filters chlorides, and a fine filter (4). The Examiner admits that Derflinger *et al.* does not disclose the type of filter employed, *i.e.*, perfluorinated sulfonic acid polymer. Since, Patil *et al.* is not available, this deficiency is not remedied.

Additionally, assuming for the sake of argument that Patil *et al.* is available for combination with Derflinger *et al.*, this hypothetical combination cannot render claim 1 obvious, because this hypothetical combination does not teach that the filter medium is substantially similar to the PEM in the fuel cell, as claimed in claim 1 and as discussed above.

Hence, claim 1 is patentable over Patil *et al.* and Derflinger *et al.*

Claims 2-14 are directly dependent on claim 1 and recite further limitations therefrom. Hence, it is unnecessary at this time to address the rejections to these dependent claims, and Applicants reserve the right to support their patentability if necessary.

Application no. 10/725,235

The Examiner also rejects claim 20 under 35 U.S.C. §102(b) as being anticipated by Patil *et al.* and under 35 U.S.C. §103(a) as being obvious over Derflinger *et al.* in view of Patil *et al.* For the same substantially the same reasons that claim 1 is patentable, claim 20 is patentable.

Claims 21-23 are directly dependent on claim 20 and recite further limitations therefrom. Hence, it is unnecessary at this time to address the rejections to these dependent claims and Applicants reserve the right to support their patentability if necessary.

Additionally, the Examiner rejects claim 15 under 35 U.S.C. §103(a) as being obvious over Derflinger *et al.* in view of Patil *et al.* Claim 15 recites, in part, a fuel cell fuel supply comprising an ion filter supported by a casing of the fuel supply. For the reasons stated above, Patil *et al.* is non-analogous art and is not available for combination with Derflinger *et al.* Additionally, neither Derflinger or Patil discloses an ion filter supported by a fuel supply's casing. Accordingly, this rejection should be withdrawn. Claims 16-19 are directly dependent on claim 15 and recite further limitations therefrom. Accordingly, these claims are also presently patentable.

In view of the foregoing remarks, the applicants respectfully request the reconsideration of this application and the timely allowance of the pending claims.


No fee is believed due for this amendment. If there are any other fees due in connection with the filing of this response, please charge the fees to Deposit Account No. 50-1980.

The Examiner is respectfully requested to contact the undersigned by telephone should there be any remaining questions as to the patentability of the pending claims.

Application no. 10/725,235

Respectfully submitted,

Date June 14, 2005


H.T. Than (Reg. No. 38,632)

The H.T. Than Law Group
Waterfront Center
1010 Wisconsin Avenue, NW, Suite 560
Washington, DC 20007
(202) 363-2620